IN THE CLAIMS:

Please cancel claim 2 and amend claims 1 and 3-16 as follows:

1. (Currently Amended)   A Mmethod for applying extracorporeally generated acoustic

pressure waves, specifically shock waves, to the body of an organism, comprising:

        applying extracorporeally generated acoustic pressure waves to target tissue of the body;

        detecting cavitation bubbles within the target tissue of the body caused by applying the

extracorporeally generated acoustic pressure waves by receiving an acoustic signal at an

extracorporeal detector and providing a received acoustic signal indicative thereof; and

        processing the received acoustic signal to determine if cavitation bubbles are present

within the target tissue of the body, and controlling the extracorporeally generated acoustic

pressure waves based upon the received acoustic signal.

characterized in that the effect of the pressure waves within the treated target area is determined

using cavitation bubbles generated within the tissue of the body by recording the acoustic signals

of these bubbles using at least one preferably extracorporeally disposed detector.

2. (Cancelled)

3.(Currently Amended)   The Mmethod of claim according to Claim 2, wherein the step of

controlling comprises automatically adjusting *characterized in* that the parameters of the

generated acoustic pressure waves generated are adjusted by an automatic control.

4.(Currently Amended)   The Mmethod of claim according to Claim 1, wherein the step of

detecting cavitation bubbles comprises *characterized in* that the effect of the pressure waves is

spatially scann~~inged in~~ the target area of the body using ~~the cavitation effect measured by~~ at least

one focused acoustic detector.

5.(Currently Amended)   The ~~M~~method of claim ~~according to Claim 4~~, wherein the step of

detecting comprises evaluating ~~characterized in that~~ the local change in the measured cavitation

effect ~~is evaluated~~ to determine the interface between different tissue materials.

6.(Currently Amended)   The ~~M~~method of claim ~~according to Claim 4~~, wherein the step of

detecting comprises evaluating ~~characterized in that~~ the local change in the measured cavitation

effect ~~is evaluated~~ to determine the spatial tissue anatomy.

7.(Currently Amended)   The ~~m~~Method of claim ~~according to Claim 1~~, wherein the step of

detecting comprises scanning to detect ~~characterized in that~~ the spatial change in the cavitation

effect ~~is scanned~~ by at least one focused detector and that the spatial pressure field of the pressure

waves is computed from the measured spatial distribution of the cavitation effect and the known

tissue structure.

8.(Currently Amended)   A ~~D~~device for applying extracorporeally generated acoustic

pressure waves to the body of an organism, the device comprising:

    ~~including~~ a pressure wave generator that generates an acoustic pressure waves; ~~(1) and~~

    a treatment head that is operatively connect to the pressure wave generator and applies the

acoustic pressure waves to a target area of the body~~(2)~~;

~~characterized by:~~ ~~at least one~~ <u>an</u> acoustic detector ~~(3a, 3b)~~ brought in contact with the surface of the body to record ~~the~~ acoustic signals from ~~the~~ cavitation bubbles generated by the pressure waves <u>and provide an detected signal indicative thereof; and</u>

~~and~~ ~~characterized by~~ an electronic evaluation <u>device that receives the detected signal and controls parameters of the acoustic pressure waves in response to the detected signal.</u> ~~means (4) to which the signals from at least one detector (3a, 3b) are fed, the parameters for the pressure waves generated by the pressure wave generator (1) being adjusted in response to the signals processed in the electronic evaluation means (4).~~

9.(Currently Amended)   <u>The d~~D~~evice of claim 8, wherein the acoustic detector comprises</u> ~~according to Claim 8, characterized in~~ ~~that~~ at least one detector ~~(3a, 3b)~~ <u>that</u> is focusable.

10.(Currently Amended)   <u>The ~~D~~device of claim</u> ~~according to Claim~~ <u>9, wherein the acoustic detector comprises</u> ~~characterized in~~ ~~that~~ at least two detectors ~~(3a, 3b)~~ <u>that</u> are connected in a coincidence circuit.

11. (Currently Amended)   <u>The ~~D~~device of claim</u> ~~according to Claim~~ <u>10, wherein the acoustic detector</u> ~~characterized in~~ ~~that the focus area of the at least one focused detector (3a, 3b)~~ is spatially adjustable for scanning <u>the</u>~~a~~ target area of the body.

12. (Currently Amended)   <u>The ~~D~~device of claim</u> ~~according to Claim~~ <u>11, wherein</u> ~~characterized in~~ ~~that~~ the electronic evaluation <u>device</u> ~~means (4)~~ controls a display unit ~~(5)~~ which displays the measured cavitation effect.

13. (Currently Amended)   The ~~D~~device of claim ~~according to Claim~~ 12, wherein the ~~characterized in that~~ the electronic evaluation device ~~means (4)~~ drives a feedback system ~~(6)~~.

14. (Currently Amended)   The ~~D~~device of claim ~~according to Claim~~ 13, wherein the ~~characterized in that the~~ feedback system ~~(6)~~ includes a control unit ~~(6a)~~ which controls the pressure wave generator ~~(1)~~ such that the actual value of the cavitation effect determined by the ~~at least one~~ acoustic detector ~~(3a, 3b)~~ and the electronic evaluation ~~device~~means ~~(4)~~ is adjusted to match a predetermined target value.

15. (Currently Amended)   The ~~D~~device of claim ~~according to Claim~~ 13, wherein ~~characterized in that~~ the feedback system ~~(6)~~ includes an actuating signal generator ~~(6b)~~ which controls the spatial adjustment of the acoustic ~~at least one~~ detector ~~(3a, 3b)~~.

16. (Currently Amended)   The ~~D~~device of claim ~~according to Claim~~ 13, wherein the ~~characterized in that the~~ feedback system ~~(6)~~ includes an image generator ~~(6c)~~ which feeds the data generated by the electronic evaluation device ~~means (4)~~ to an image-processing system ~~(7)~~.